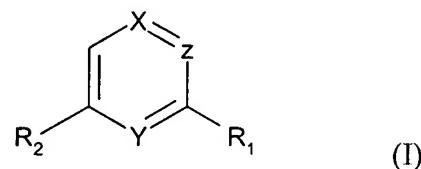


Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

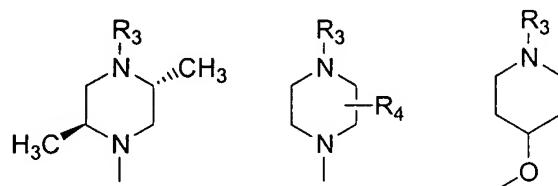
Listing of Claims:

1. (Currently Amended) A compound of the formula (I):



wherein

(iii) Y and Z represent both nitrogen and X represents CH, forming a pyrimidine derivative, and  
wherein R<sub>1</sub> and R<sub>2</sub> are each, independently, selected from a group A consisting of



or from a group B, consisting of aryl-C<sub>1</sub>-C<sub>6</sub>-alkyl, aryl-C<sub>1</sub>-C<sub>6</sub>-alkoxy, heteroaryl-C<sub>1</sub>-C<sub>6</sub>-alkoxy, aryloxy-C<sub>2</sub>-C<sub>6</sub>-alkoxy, heteroaryloxy-C<sub>2</sub>-C<sub>6</sub>-alkoxy, 1-indanyloxy, 2-indanyloxy, aryloxy, heteroaryloxy, arylthio, heteroarylthio, C<sub>5</sub>-C<sub>6</sub>-cycloalkylthio, C<sub>5</sub>-C<sub>8</sub>-alkoxy, C<sub>5</sub>-C<sub>8</sub>-alkylthio, C<sub>3</sub>-C<sub>6</sub>-alkynyoxy, C<sub>3</sub>-C<sub>6</sub>-alkenyloxy, fluoro-C<sub>2</sub>-C<sub>4</sub>-alkoxy, C<sub>4</sub>-C<sub>8</sub>-cycloalkyloxy, C<sub>3</sub>-C<sub>8</sub>-cycloalkyl-C<sub>1</sub>-C<sub>4</sub>-alkoxy, halogen, aryl-C<sub>1</sub>-C<sub>4</sub>-alkylthio, heteroaryl-C<sub>1</sub>-C<sub>4</sub>-alkylthio, aryl-C<sub>1</sub>-C<sub>4</sub>-alkylamino, heteroaryl-C<sub>1</sub>-C<sub>4</sub>-alkylamino, heteroaryl and aryl;

with the proviso that:

(i) R<sub>1</sub> and R<sub>2</sub> are different and are not both selected from group A or group B at the same time;

(iii) when X is CH and Z and Y both are nitrogen in formula (I), forming a pyrimidine derivative, and R<sub>2</sub> is 1-piperazinyl, then R<sub>1</sub> is other than phenoxy, phenyl or phenyl substituted by bromo, and C<sub>5</sub>-C<sub>8</sub> alkoxy; and when R<sub>2</sub> is 4-methylpiperazin-1-yl or 4-(2-hydroxyethyl)piperazin-1-yl, then R<sub>1</sub> is other than 5-nitro-2-furyl;

(iv) when X is CH and Z and Y both are nitrogen in formula (I), forming a pyrimidine derivative, and R<sub>1</sub> is 1-piperazinyl, then R<sub>2</sub> is other than C<sub>5</sub>-C<sub>8</sub> alkoxy; and where R<sub>3</sub> is H or C<sub>1-4</sub>-alkyl, allyl, 2-hydroxyethyl, 2-cyanoethyl, or a nitrogen protecting group;

R<sub>4</sub> is hydrogen, or C<sub>1-4</sub> alkyl;

and wherein any aryl or heteroaryl residue, alone or as part of another group, in R<sub>1</sub> or R<sub>2</sub> may be independently substituted in one or more positions, by C<sub>1-4</sub>-alkyl, C<sub>1-4</sub>-alkoxy, C<sub>1-4</sub>-alkylthio, C<sub>2-4</sub>-acyl, C<sub>1-4</sub>-alkylsulphonyl, cyano, nitro, hydroxy, C<sub>2-6</sub>-alkenyl, C<sub>2-6</sub>-alkynyl, fluoromethyl, trifluoromethyl, trifluoromethoxy, halogen, -N(R<sub>5</sub>)(R<sub>6</sub>), aryl, aryloxy, arylthio, aryl-C<sub>1-4</sub>-alkyl, aryl-C<sub>2-4</sub>-alkenyl, aryl-C<sub>2-4</sub>-alkynyl, heteroaryl, heteroaryloxy, heteroarylthio or heteroaryl-C<sub>1-4</sub>-alkyl, aryl-C<sub>1-4</sub>-alkoxy, aryloxy-C<sub>1-4</sub>-alkyl, dimethylamino-C<sub>2-4</sub>-alkoxy; and

wherein any aryl or heteroaryl residue as substituents on aryl or heteroaryl, alone or as part of another group, in R<sub>1</sub> or R<sub>2</sub> in turn may be substituted in one or more positions, independently of each other by C<sub>1-4</sub>-alkyl, C<sub>1-4</sub>-alkoxy, halogen, trifluoromethyl, cyano, hydroxy or dimethylamino; and

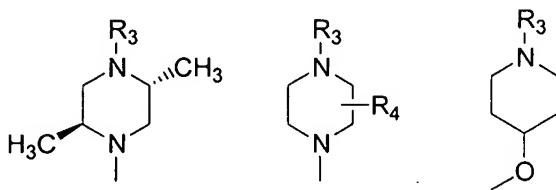
R<sub>5</sub> and R<sub>6</sub> independently of each other are hydrogen, methyl or ethyl, or together with the nitrogen atom to which they are bound form a pyrrolidine, piperazine, morpholine, thiomorpholine or a piperidine ring; or a pharmaceutically acceptable salt, geometrical isomer, tautomer, optical isomer, or N-oxide form thereof.

2. (Withdrawn) The compound according to claim 1, wherein X and Z represent both CH and Y represents nitrogen, forming a pyridine derivative.

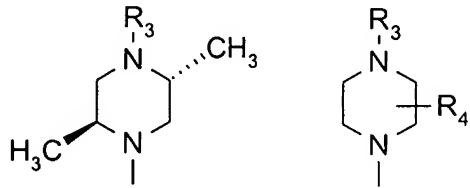
3. (Withdrawn) The compound according to claim 1, wherein formula (I) represents a 4-trifluoromethylpyridine derivative.

4. (Cancelled)

5. (Original) The compound according to claim 1 wherein R<sub>3</sub> is hydrogen and R<sub>1</sub> or R<sub>2</sub> is selected from

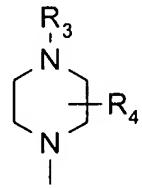


6. (Original) The compound according to claim 1 wherein R<sub>1</sub> or R<sub>2</sub> is selected from



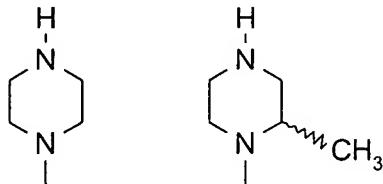
and where R<sub>3</sub> is hydrogen and R<sub>4</sub> is selected from hydrogen, methyl or ethyl.

7. (Original) The compound according to claim 1 wherein R<sub>1</sub> or R<sub>2</sub> is



and where R<sub>3</sub> is hydrogen and R<sub>4</sub> is selected from hydrogen, methyl or ethyl.

8. (Original) The compound according to claim 1, wherein R<sub>1</sub> or R<sub>2</sub> is selected from



9. (Previously Presented) The compound according to claim 1, which is selected from the group consisting of:

4-(Benzyl)-2-(1-piperazinyl)pyrimidine,  
4-[(2-Methoxybenzyl)oxy]-2-(1-piperazinyl)pyrimidine, and  
2-{{[3-(Benzyl)oxy]benzyl}oxy}-4-(1-piperazinyl)pyrimidine,  
or a pharmacologically acceptable salt thereof.

10. (Original) A pharmaceutical composition comprising a compound according to claim 1 as an active ingredient, together with a pharmaceutically acceptable carrier.

11. (Cancelled) .

12. (Cancelled)

13. (Previously Presented) A method for the treatment of an eating disorder, comprising administering to a subject in need thereof a therapeutically effective amount of a compound according to claim 1.

14. (Previously Presented) A method for the treatment of obesity, comprising administering to a subject in need thereof a therapeutically effective amount of a compound according to claim 1.

15. (Currently Amended) A method for the treatment of Alzheimer's disease a ~~memory disorder~~, comprising administering to a subject in need thereof a therapeutically effective amount of a compound according to claim 1.

16. (Currently Amended) A method for the treatment of depression a ~~mood disorder~~, comprising administering to a subject in need thereof a therapeutically effective amount of a compound according to claim 1.

17. (Previously Presented) A method for the treatment of an anxiety disorder, comprising administering to a subject in need thereof a therapeutically effective amount of a compound according to claim 1.

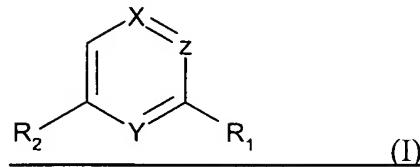
18. (Currently Amended) A method for the treatment of sexual dysfunctions, epilepsy ~~or urinary disorders~~, comprising administering to a subject in need thereof a therapeutically effective amount of a compound according to claim 1.

19. (Previously Presented) A method for the treatment of pain, comprising administering to a subject in need thereof a therapeutically effective amount of a compound according to claim 1.

20. (Cancelled)

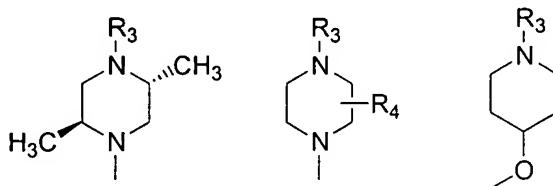
21. (Previously Presented) A method for the treatment of schizophrenia, comprising administering to a subject in need thereof a therapeutically effective amount of a compound according to claim 1.

22. (Currently Amended) A method of making a compound of claim 1, formula (I):



wherein:

Y and Z represent both nitrogen and X represents CH, forming a pyrimidine derivative,  
and wherein R<sub>1</sub> and R<sub>2</sub> are each, independently, selected from a group A consisting of



or from a group B, consisting of aryl-C<sub>1</sub>-C<sub>6</sub>-alkoxy, heteroaryl-C<sub>1</sub>-C<sub>6</sub>-alkoxy, aryloxy-C<sub>2</sub>-C<sub>6</sub>-alkoxy, heteroaryloxy-C<sub>2</sub>-C<sub>6</sub>-alkoxy, 1-indanyloxy, 2-indanyloxy, aryloxy, heteroaryloxy, arylthio, heteroarylthio, C<sub>5</sub>-C<sub>6</sub>-cycloalkylthio, C<sub>5</sub>-C<sub>8</sub>-alkoxy, C<sub>5</sub>-C<sub>8</sub>-alkylthio, C<sub>3</sub>-C<sub>6</sub>-alkynyloxy, C<sub>3</sub>-C<sub>6</sub>-alkenyloxy, fluoro-C<sub>2</sub>-C<sub>4</sub>-alkoxy, C<sub>4</sub>-C<sub>8</sub>-cycloalkyloxy, C<sub>3</sub>-C<sub>8</sub>-cycloalkyl-C<sub>1</sub>-C<sub>4</sub>-alkoxy, aryl-C<sub>1</sub>-C<sub>4</sub>-alkylthio, heteroaryl-C<sub>1</sub>-C<sub>4</sub>-alkylthio, aryl-C<sub>1</sub>-C<sub>4</sub>-alkylamino, heteroaryl-C<sub>1</sub>-C<sub>4</sub>-alkylamino, heteroaryl and aryl;

with the proviso that:

(i) R<sub>1</sub> and R<sub>2</sub> are different and are not both selected from group A or group B at the same time; and

(ii) when X is CH and Z and Y both are nitrogen in formula (I), forming a pyrimidine derivative, and R<sub>2</sub> is 1-piperazinyl, then R<sub>1</sub> is other than phenoxy, phenyl or phenyl substituted by bromo, and C<sub>5</sub>-C<sub>8</sub> alkoxy; and when R<sub>2</sub> is 4-methylpiperazin-1-yl or 4-(2-hydroxyethyl)piperazin-1-yl, then R<sub>1</sub> is other than 5-nitro-2-furyl; and

(iii) when X is CH and Z and Y both are nitrogen in formula (I), forming a pyrimidine derivative, and R<sub>1</sub> is 1-piperazinyl, then R<sub>2</sub> is other than C<sub>5</sub>-C<sub>8</sub> alkoxy;

and where R<sub>3</sub> is H or C<sub>1-4</sub>-alkyl, allyl, 2-hydroxyethyl, 2-cyanoethyl, or a nitrogen protecting group;

R<sub>4</sub> is hydrogen, or C<sub>1-4</sub> alkyl;

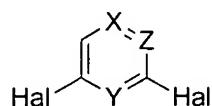
and wherein any aryl or heteroaryl residue, alone or as part of another group, in R<sub>1</sub> or R<sub>2</sub> may be independently substituted in one or more positions, by C<sub>1-4</sub>-alkyl, C<sub>1-4</sub>-alkoxy, C<sub>1-4</sub>-alkylthio, C<sub>2-4</sub>-acyl, C<sub>1-4</sub>-alkylsulphonyl, cyano, nitro, hydroxy, C<sub>2-6</sub>-alkenyl, C<sub>2-6</sub>-alkynyl, fluoromethyl, trifluoromethyl, trifluoromethoxy, halogen, -N(R<sub>5</sub>)(R<sub>6</sub>), aryl, aryloxy, arylthio, aryl-C<sub>1-4</sub>-alkyl, aryl-C<sub>2-4</sub>-alkenyl, aryl-C<sub>2-4</sub>-alkynyl, heteroaryl, heteroaryloxy, heteroarylthio or heteroaryl-C<sub>1-4</sub>-alkyl, aryl-C<sub>1-4</sub>-alkoxy, aryloxy-C<sub>1-4</sub>-alkyl, dimethylamino-C<sub>2-4</sub>-alkoxy; and wherein any aryl or heteroaryl residue as substituents on aryl or heteroaryl, alone or as part of another group, in R<sub>1</sub> or R<sub>2</sub> in turn may be substituted in one or more postions, independently of each other by C<sub>1-4</sub>-alkyl, C<sub>1-4</sub>-alkoxy, halogen, trifluoromethyl, cyano, hydroxy or dimethylamino; and

R<sub>5</sub> and R<sub>6</sub> independently of each other are hydrogen, methyl or ethyl, or together with the nitrogen atom to which they are bound form a pyrrolidine, piperazine, morpholine, thiomorpholine or a piperidine ring;

or a pharmaceutically acceptable salt, geometrical isomer, tautomer, optical isomer, or N-oxide form thereof;

the method comprising:

(a) converting contacting a compound of the following formula:



wherein

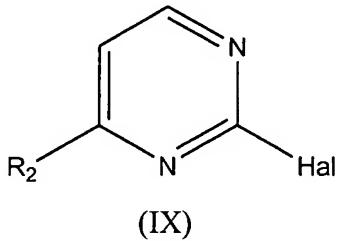
Y and Z represent both nitrogen and X represents CH, forming a pyrimidine derivative, and wherein each Hal is independently a halogen; with a compound selected from the group consisting of:

(i)  $R^2$ -OH, wherein  $R^2$  is aryl-C<sub>1</sub>-C<sub>6</sub>-alkyl, heteroaryl-C<sub>1</sub>-C<sub>6</sub>-alkyl, aryloxy-C<sub>2</sub>-C<sub>6</sub>-alkyl, heteroaryloxy-C<sub>2</sub>-C<sub>6</sub>-alkyl, 1-indanyl, 2-indanyl, aryl, heteroaryl, C<sub>5</sub>-C<sub>8</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-alkynyl, C<sub>3</sub>-C<sub>6</sub>-alkenyl, fluoro-C<sub>2</sub>-C<sub>4</sub>-alkyl, C<sub>4</sub>-C<sub>8</sub>-cycloalkyl, or C<sub>3</sub>-C<sub>8</sub>-cycloalkyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, each of which is optionally substituted;

(ii)  $R^2$ -SH, wherein  $R^2$  is aryl, heteroaryl, C<sub>5</sub>-C<sub>6</sub>-cycloalkyl, C<sub>5</sub>-C<sub>8</sub>-alkyl, aryl-C<sub>1</sub>-C<sub>4</sub>-alkyl, or heteroaryl-C<sub>1</sub>-C<sub>4</sub>-alkyl, each of which is optionally substituted;

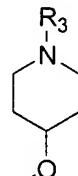
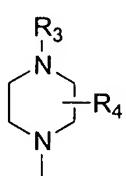
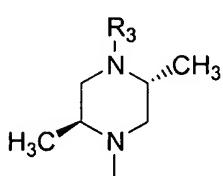
(iii)  $R^2$ -NH<sub>2</sub>, wherein  $R^2$  is aryl-C<sub>1</sub>-C<sub>4</sub>-alkyl or an heteroaryl-C<sub>1</sub>-C<sub>4</sub>-alkyl, each of which is optionally substituted; or

(iv)  $R^2$ -B(OH)<sub>2</sub>; wherein  $R^2$  is heteroaryl or aryl, each of which is optionally substituted; to form a compound of formula (IX):



wherein  $R_2$  is selected from Group B as defined above in claim 1 and with the proviso that  $R_2$  is not any of the following groups:

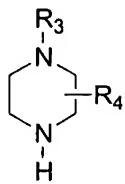
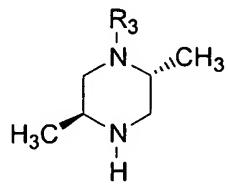
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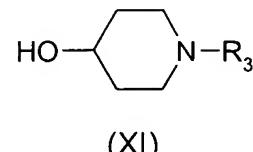
, or

]]; and

(b) contacting the compound of formula (IX) with a compound selected from the group consisting of:



and

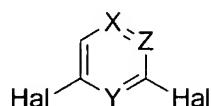


(XI)

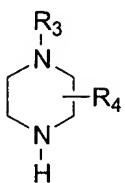
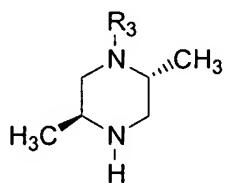
;

or

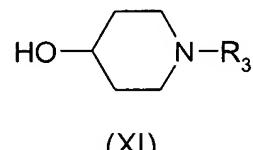
(a') converting contacting a compound of the following formula:



wherein Y and Z represent both nitrogen and X represents CH, forming a pyrimidine derivative, and wherein each Hal is independently a halogen; with a compound selected from the group consisting of:



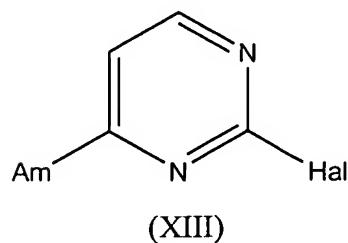
and



(XI)

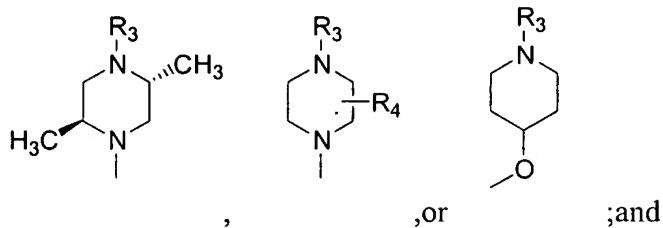
;

to form a compound of formula (XIII):



(XIII)

wherein Am is an amine residue selected from the group consisting of:



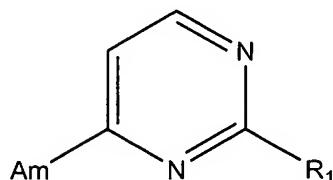
(b') converting contacting the compound of formula (XIII) with a compound selected from the group consisting of:

(i) R<sup>1</sup>-OH, wherein R<sup>1</sup> is aryl-C<sub>1</sub>-C<sub>6</sub>-alkyl, heteroaryl-C<sub>1</sub>-C<sub>6</sub>-alkyl, aryloxy-C<sub>2</sub>-C<sub>6</sub>-alkyl, heteroaryloxy-C<sub>2</sub>-C<sub>6</sub>-alkyl, 1-indanyl, 2-indanyl, aryl, heteroaryl, C<sub>5</sub>-C<sub>8</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-alkynyl, C<sub>3</sub>-C<sub>6</sub>-alkenyl, fluoro-C<sub>2</sub>-C<sub>4</sub>-alkyl, C<sub>4</sub>-C<sub>8</sub>-cycloalkyl, or C<sub>3</sub>-C<sub>8</sub>-cycloalkyl-C<sub>1</sub>-C<sub>4</sub>-alkyl, each of which is optionally substituted;

(ii) R<sup>1</sup>-SH, wherein R<sup>1</sup> is aryl, heteroaryl, C<sub>5</sub>-C<sub>8</sub>-cycloalkyl, C<sub>5</sub>-C<sub>8</sub>-alkyl, aryl-C<sub>1</sub>-C<sub>4</sub>-alkyl, or heteroaryl-C<sub>1</sub>-C<sub>4</sub>-alkyl, each of which is optionally substituted;

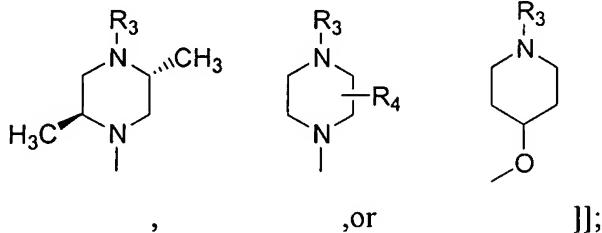
(iii) R<sup>1</sup>-NH<sub>2</sub>, wherein R<sup>1</sup> is aryl-C<sub>1</sub>-C<sub>4</sub>-alkyl or an heteroaryl-C<sub>1</sub>-C<sub>4</sub>-alkyl, each of which is optionally substituted; or

(iv) R<sup>1</sup>-B(OH)<sub>2</sub>; wherein R<sup>1</sup> is heteroaryl or aryl, each of which is optionally substituted; to form a compound of the following formula:



wherein R<sub>1</sub> is selected from Group B as defined above in claim 1 and with the proviso  
~~that R<sub>1</sub> is not any of the following groups:~~

[[



thereby producing a compound of claim 1.

23. (Cancelled)

24. (Cancelled)

25. (Original) The compound according to claim 1, wherein R<sub>3</sub> is an acyl- or alkoxy carbonyl group forming a cleavable amide or carbamate linkage.

26. (Cancelled)

27. (Cancelled)

28. (New) A method for the treatment of urinary incontinence, comprising administering to a subject in need thereof a therapeutically effective amount of a compound according to claim 1.